WO 2005/044275 PCT/GB2004/004704

27 CLAIMS

- 1. Use of roscovitine, or a pharmaceutically acceptable salt thereof, in the preparation of a medicament for treating multiple myeloma.
- 2. Use according to claim 1 wherein the roscovitine is administered in combination with a pharmaceutically acceptable carrier, diluent or excipient.
- 3. Use according to claim 1 or claim 2 wherein the roscovitine is administered in an amount sufficient to inhibit at least one CDK enzyme.
- 4. Use according to claim 3 wherein the CDK enzyme is selected from CDK1, CDK2, CDK4, CDK7 and CDK9.
- 5. Use according to claim 3 wherein the CDK enzyme is selected from CDK1 and CDK2.
- 6. Use according to claim 3 wherein the CDK enzyme is selected from CDK7 and CDK9.
- 7. Use according to any preceding claim wherein the multiple myeloma is selected from IgA myeloma, IgG myeloma, IgD myeloma, IgE myeloma, Bence Jones myeloma and non-secretory myeloma.
- 8. Use according to claim 7 wherein the multiple myeloma is IgA or IgG myeloma.
- 9. Use according to any preceding claim wherein the roscovitine is administered in combination with one or more other antiproliferative agents.

WO 2005/044275 PCT/GB2004/004704

28

- 10. A method of treating a patient suffering from multiple myeloma comprising administering a therapeutically effective amount of roscovitine or a pharmaceutically effective salt thereof.
- 11. A method according to claim 10 wherein the roscovitine is administered in an amount sufficient to inhibit at least one CDK enzyme.
- 12. A method according to claim 10 or claim 11 wherein the CDK enzyme is selected from CDK1, CDK2, CDK4, CDK7 and CDK9.
- 13. A method according to any one of claims 10 to 12 wherein the CDK enzyme is selected from CDK1 and CDK2.
- 14. A method according to any one of claims 10 to 12 wherein the CDK enzyme is selected from CDK7 and CDK9.
- 15. A method according to any one of claims 10 to 14 wherein the multiple myeloma is selected from IgA myeloma, IgG myeloma, IgD myeloma, IgE myeloma, Bence Jones myeloma and non-secretory myeloma.
- 16. A method according to claim 15 wherein the multiple myeloma is IgA or IgG myeloma.
- 17. A method according to any one of claims 10 to 16 wherein the roscovitine is administered in combination with a pharmaceutically acceptable carrier, diluent or excipient.
- 18. A method according to any one of claims 10 to 17 wherein the roscovitine is administered in combination with one or more other antiproliferative agents.

1

WO 2005/044275 PCT/GB2004/004704

29

- 19. A pharmaceutical composition comprising (i) roscovitine, or a pharmaceutically acceptable salt thereof; and optionally (ii) a pharmaceutically acceptable carrier, diluent or excipient, for use in the treatment of multiple myeloma.
- 20. A method of down regulating expression of an anti-apoptotic gene in multiple myeloma cells, the method comprising contacting the cells with roscovitine, or a pharmaceutically acceptable salt thereof.
- 21. A method of treating multiple myeloma in a subject, the method comprising administering roscovitine, or a pharmaceutically acceptable salt thereof, to the subject in an amount sufficient to down regulate the expression of an anti-apoptotic gene in the subject.
- 22. The method of claim 20 or 21 wherein the anti-apoptotic gene is Mcl-1.
- 23. A method of down-regulating Mcl-1 expression in multiple myeloma cells, said method comprising contacting said cells with roscovitine, or a pharmaceutically acceptable salt thereof.
- 24. A method of treating multiple myeloma in a subject, said method comprising administering roscovitine, or a pharmaceutically acceptable salt thereof, to the subject in an amount sufficient to down-regulate the expression of Mcl-1 in said subject.
- 25. Use of roscovitine, or a pharmaceutically acceptable salt thereof, in the preparation of a medicament for treating multiple myeloma, wherein the roscovitine or a pharmaceutically acceptable salt thereof, is in an amount sufficient to down-regulate the expression of Mcl-1.
- 26. Use or a method substantially as described herein, with reference to the accompanying figures.